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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/932,866	08/17/2001	Gerard Chauvel	TI-31347	6569

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EXAMINER

KIM, HONG CHONG

ART UNIT	PAPER NUMBER
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2186

DATE MAILED: 12/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/932,866

Applicant(s)

CHAUVEL ET AL.

Examiner

Hong C Kim

Art Unit

2186

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-10, 14 and 15 is/are rejected.
- 7) ☒ Claim(s) 4-5 12-13 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. 6) ☐ Other: _____

Detailed Action

1. Claims 1-16 are presented for examination. This office action is in response to the amendment filed on 8/25/03.
2. Applicants are reminded of the duty to disclose information under 37 CFR 1.56.

Priority

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-3, 6-10, and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lim US Patent No. 6,430,640 in view of Cutts, Jr. et al. (Cutts) US Patent No. 5,588,111.

As to claim 1, Lim discloses a method for prioritizing access to a shared resource in a digital having a plurality of devices vying for access to the shared resource (abstract), comprising

the steps of: initiating an access request by each of the plurality of devices (col. 4 lines 1-5); providing priority value (col. 4 lines 9-10) along with each access request from each device; and arbitrating for access to the shared device by using the higher of priority value from each device (abstract and col. 13 lines 1-12), however, Lim does not specifically disclose two priority values.

Cutts discloses two priority values (PID and VPN, Fig. 20) and using the higher of priority values from each device (PID reads on this limitation since if the PID does not match the access id denied) for the purpose of providing higher reliability than a single priority value.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate two priority values as shown in Cutts into the invention of Lim for the advantages stated above.

As to claim 2, Lim further discloses wherein the step of providing two priority values comprises the steps of; establishing a software priority state associated with a program module; executing an instruction from the program module; and providing an access priority value with the access request that is responsive to the software priority state of the program module (col. 13 lines 39-42 and col. 15 lines 8-29, arbitration units 404 can be implemented using hardware, software, or a combination thereof and priorities can be assigned and updated on the fly read on this limitation).

As to claim 3, Cutts further discloses the step of providing an address space priority value

with each request in repose to an address specified by each access request (PID and VPN, Fig. 20).

As to claim 6, Lim discloses the step of wherein another device vying for access to the shared resource provides one or the other but not both of the two priority values (abstract and col. 13 lines 1-12).

As to claim 14, Cutts further discloses the step of providing an access priority value and an address space priority value (PID and VPN, Fig. 20).

As to claim 15, Cutts further discloses TID (PID Fig. 20).

As to claim 7, Lim discloses a digital system (abstract) comprising: a shared resource (abstract); a plurality of devices (col. 4 lines 1-5) connected to access the shared resource, wherein each device has a request output and circuitry for providing two separate variable priority values (col. 4 lines 1-10); arbitration circuitry (abstract and col. 13 lines 1-12), however, Lim does not specifically disclose two separate variable priority values.

Cutts discloses two separate variable priority values (PID and VPN, Fig. 20) for the purpose of providing higher reliability than a single priority value.

Therefore, it would have been obvious to one having ordinary skill in the art at the time

the invention was made to incorporate two separate variable priority values as shown in Cutts into the invention of Lim for the advantages stated above.

As to claim 8, Lim discloses the invention as claimed. Lim discloses a digital system (abstract) comprising: a shared resource (abstract); a plurality of devices (col. 4 lines 1-5) connected to access the shared resource, wherein each device has an access priority register and a request output (col. 4 lines 1-10), wherein the access priority register of each device is loaded with a value by software executing on the respective device (col. 13 lines 39-42 and col. 15- 8-29, arbitration units 404 can be implemented using hardware, software, or a combination thereof and priorities can be assigned and updated on the fly read on this limitation); a plurality of memory management units (Fig. 11 and col. 2 lines 34-46); arbitration circuitry (abstract and col. 13 lines 1-12), however, Lim does not specifically disclose access priority value and address space priority value.

Cutts discloses access priority value and address space priority value (PID and VPN, Fig. 20) for the purpose of providing higher reliability than a single priority value.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate access priority value and address space priority value as shown in Cutts into the invention of Lim for the advantages stated above.

As to claim 9, Lim discloses a portion of the access priority register is set responsive to

an interrupt received by the respective device (col. 13 lines 39-42 and col. 15 lines 8-29, arbitration units 404 can be implemented using hardware, software, or a combination thereof and priorities can be assigned and updated on the fly read on this limitation).

As to claim 10, Lim discloses only a portion of the access priority register can be modified by the application software being executed on the respective device (col. 13 lines 39-42 and col. 15 lines 8-29, arbitration units 404 can be implemented using hardware, software, or a combination thereof and priorities can be assigned and updated on the fly read on this limitation).

6. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lim US Patent No. 6,430,640 in view of Cutts, Jr. et al. (Cutts) US Patent No. 5,588,111 and further in view of Woolsey et al. (Woolsey) US Patent No. 6,029,000.

As to claim 11, Lim and Cutts disclose the invention as claimed in the above. However, neither Lim nor Cutts discloses the digital system being a cellular telephone and further comprises; an integrated keyboard connected to the CPU, a display, radio frequency circuitry, and an aerial connected to the RF circuitry.

Woolsey discloses the digital system being a cellular telephone (Fig. 1) and further comprises; an integrated keyboard (Fig. 1 Ref. 36) connected to the CPU, a display, radio frequency circuitry, and an aerial connected to the RF circuitry (col. 2 lines 29-44) for the purpose of providing a portability of the system.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the digital system being a cellular telephone and further comprises; an integrated keyboard connected to the CPU, a display, radio frequency circuitry, and an aerial connected to the RF circuitry as shown in Woolsey into the combined invention of Lim and Cutts for the advantages stated above.

Allowable Subject Matter

7. Claims 4-5, 12-13 and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Amendment

8. Applicant's arguments filed on 8/25/03 have been fully considered but they are not persuasive.

Applicant's argument on page 7 that the reference does not disclose two priority values is not considered persuasive.

Cutts discloses two priority values (PID and VPN; Fig. 20).

Therefore broadly written claims are disclosed by the references cited.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See attached PTO-892.

10. a shortened statutory period for response to this action is set to expire 3 (three) months and 0 (zero) days from the mail date of this letter. Failure to respond within the period for response will result in **ABANDONMENT** of the application (see 35 USC 133, MPEP 710.02, 710.02(b)).

11. When responding to the office action, Applicant is advised to clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. He or she must also show how the amendments avoid such references or objections. See 37 C.F.R. § 1.111(c).

12. When responding to the office action, Applicants are advised to provide the examiner with the line numbers and page numbers in the application and/or references cited to assist examiner to locate the appropriate paragraphs.

13. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Hong Kim whose telephone number is (703) 305-3835. The Examiner can normally be reached on the weekdays from 8:30 AM to 5:00 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's

supervisor, Matt Kim, can be reached on (703) 305-3821.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

14. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to TC-2100:

Official (703) 872-9306, New as of 8/4/2003
After-Final (703) 746-7238
Official (703) 746-7239 (for formal communications intended for

entry)

Non-Official/Draft (703) 746-7240 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).



HK
Primary Patent Examiner
December 4, 2003